Other examples of the technique of this kind are disclosed in Japanese Patent No. 2655467 and Japanese Unexamined Patent Publications (JP-A) Nos. Tokkai-Hei 10-285175 (285175/1998), Tokkai-Hei 10-107796 (107796/1998), Tokkai-Hei 9-83546 (83546/1997) and Tokkai-Hei 8-51432 (51432/1996).

The route design system thus constructed is troubled by a problem that the design takes a long time, because the operation of the first existing link space capacity re-calculation unit 12-6 is performed each time the demand is received. The method of solving that problem is disclosed in none of the foregoing Publications.

SUMMARY OF THE INVENTION

Therefore, an object of the invention is to provide a route design system and a route design method which is capable of realizing a high-speed accommodation design.

The present invention provides a route design system among nodes from at least one of starting node through a plurality of relay nodes to a terminal node. This route design system comprises: a route candidate design unit for designing a plurality of different route candidates from the starting node to the terminal node; and an accommodation unit for accommodating a demand in a predetermined one of the routes designed by the route candidate design unit, according to a predetermined procedure.

A route design method according to the present invention designs nodes from at least one of starting node through a plurality of relay nodes to a terminal node. This route design method comprises: a route candidate design step for designing a plurality of different route candidates from the starting node to the terminal node; and an accommodation step for accommodating a demand in a predetermined